

ABSTRACT OF THE DISCLOSURE

Positioning marks 15, 16 are formed at predetermined positions with respect to an active layer 11 buried in an LD chip body 10. In an Au metallized layer 12 for solder joining on the active layer 11, marks 17, 18 for measurement are precisely formed by the same mask with which the positioning marks 15, 16 are formed. The marks 17, 18 for measurement are arranged closer to the active layer 11 in comparison with the positioning marks 15, 16. Therefore, the distances between the active layer 11 and the marks 17, 18 for measurement can be respectively measured with high accuracy. In mounting of the LD chip to a substrate in a passive alignment technique, relative positions of the active layer and the positioning marks are measured in advance with high accuracy and the LD chip can be mounted to the substrate by correcting both the relative positions. Thus, the LD chip is positioned with high accuracy to be mounted to the substrate. The LD chip and an optical waveguide, or an optical fiber arranged in the substrate, can be coupled to each other with high coupling efficiency.

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